

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

22 -51 (Canceled)

52. (New) A polypeptide comprising:

an amino acid sequence from the 20th amino acid Cys to the 361st amino acid Ser of
SEQ ID NO:1; or

an amino acid sequence from the 20th amino acid Cys to the 361st amino acid Ser of
SEQ ID NO:1 with one to ten amino acids deleted, added, or substituted with a different amino
acid, wherein the polypeptide has hemopoietic factor receptor protein activity.

53. (New) A polypeptide comprising:

an amino acid sequence from the 20th amino acid Cys to the 144th amino acid Leu of
SEQ ID NO:3; or

an amino acid sequence from the 20th amino acid Cys to the 144th amino acid Leu of
SEQ ID NO:3 with one to ten amino acids deleted, added, or substituted with a different amino
acid, wherein the polypeptide has hemopoietic factor receptor protein activity.

54. (New) A polypeptide comprising:

an amino acid sequence from the 1st amino acid Met to the 237th amino acid Ser of SEQ
ID NO:5; or

an amino acid sequence from the 1st amino acid Met to the 237th amino acid Ser of SEQ ID NO:5 with one to ten amino acids deleted, added, or substituted with a different amino acid, wherein the polypeptide has hemopoietic factor receptor protein activity.

55. (New) A polypeptide having hemopoietic factor receptor protein activity encoded by a nucleic acid that hybridizes under highly stringent conditions to a nucleic acid comprising the nucleotide sequence of SEQ ID NO:2, or the complement thereof, wherein said highly stringent conditions are 65 °C, 2x SSC, and 0.1% SDS.

56. (New) A polypeptide having hemopoietic factor receptor protein activity encoded by a nucleic acid that hybridizes under highly stringent conditions to a nucleic acid comprising the nucleotide sequence of SEQ ID NO:4, or the complement thereof, wherein said highly stringent conditions are 65 °C, 2x SSC, and 0.1% SDS.

57. (New) A polypeptide having hemopoietic factor receptor protein activity encoded by a nucleic acid that hybridizes under highly stringent conditions to a nucleic acid comprising the nucleotide sequence of SEQ ID NO:6, or the complement thereof, wherein said highly stringent conditions are 65 °C, 2x SSC, and 0.1% SDS.

58. (New) A purified fusion polypeptide comprising the polypeptide of claim 52 and a second polypeptide or peptide.

59. (New) An isolated nucleic acid that hybridizes under highly stringent conditions to a nucleic acid comprising the nucleotide sequence of SEQ ID NO: 2, 4, or 6, or the complement thereof, wherein said highly stringent conditions are 65 °C, 2x SSC, and 0.1% SDS.

60. (New) An isolated nucleic acid comprising the nucleotide sequence of SEQ ID NO: 2, 4, or 6.

61. (New) An isolated nucleic acid, wherein the nucleic acid comprises a nucleotide sequence from the 498th nucleotide T to the 1523rd nucleotide C in SEQ ID NO:2; a nucleotide sequence from the 498th nucleotide T to the 872nd nucleotide A in SEQ ID NO:4; or a nucleotide sequence from the 659th nucleotide A to the 1368th nucleotide C in SEQ ID NO:6.

62. (New) A vector comprising the nucleic acid of claim 59.

63. (New) A cell comprising the nucleic acid of claim 61, wherein said nucleic acid is operably linked to an expression regulating regulatory nucleotide sequence.

64. (New) A method of producing a polypeptide comprising the amino acid sequence from the 20th amino acid Cys to the 361st amino acid Ser of SEQ ID NO:1, a polypeptide comprising the amino acid sequence from the 20th amino acid Cys to the 144th amino acid Leu of SEQ ID NO:3, or a polypeptide comprising the amino acid sequence from the 1st amino acid Met to the 237th amino acid Ser of SEQ ID NO:5, the method comprising culturing the cell of claim 63 and isolating a polypeptide comprising the amino acid sequence from the 20th amino acid Cys to the 361st amino acid Ser of SEQ ID NO:1, a polypeptide comprising the amino acid sequence from the 20th amino acid Cys to the 144th amino acid Leu of SEQ ID NO:3, or a polypeptide comprising the amino acid sequence from the 1st amino acid Met to the 237th amino acid Ser of SEQ ID NO:5 from said cell, thereby producing said polypeptide.

65. (New) A method of obtaining a compound that binds to the polypeptide of claim 52, the method comprising:

- (a) contacting a test sample with said polypeptide;
- (b) detecting a compound in the test sample that binds to said polypeptide; and
- (c) isolating the compound, thereby obtaining a compound that binds to said polypeptide.

66. (New) A nucleic acid comprising a nucleotide sequence of at least 15 nucleotides that hybridizes under stringent conditions to a nucleic acid comprising a nucleotide sequence of any one of SEQ ID NOs: 2, 4, 6, 23, 24, 25, 26, or 27, or the complement thereof, wherein said stringent conditions are 50 °C, 2x SSC, and 0.1% SDS.

67. (New) A purified fusion polypeptide comprising the polypeptide of claim 53 and a second polypeptide or peptide.

68. (New) A purified fusion polypeptide comprising the polypeptide of claim 54 and a second polypeptide or peptide.

69. (New) A vector comprising the nucleic acid of claim 60.

70. (New) A vector comprising the nucleic acid of claim 61.

71 (New) A method of obtaining a compound that binds to the polypeptide of claim 53, the method comprising

- (a) contacting a test sample with the polypeptide of claim 53;
- (b) detecting a compound in the test sample that binds to said polypeptide; and
- (c) isolating the compound, thereby obtaining a compound that binds to said polypeptide.

72. (New) A method of obtaining a compound that binds to the polypeptide of claim 54, the method comprising:

- (a) contacting a test sample with the polypeptide of claim 54;
- (b) detecting a compound in the test sample that binds to said polypeptide; and
- (c) isolating the compound, thereby obtaining a compound that binds to said polypeptide.

73. (New) A method of obtaining a compound that binds to the polypeptide of claim 55, the method comprising:

- (a) contacting a test sample with the polypeptide of claim 55;
- (b) detecting a compound in the test sample that binds to said polypeptide; and
- (c) isolating the compound, thereby obtaining a compound that binds to said polypeptide.

74. (New) A method of obtaining a compound that binds to the polypeptide of claim 56, the method comprising

- (a) contacting a test sample with the polypeptide of claim 56;
- (b) detecting a compound in the test sample that binds to said polypeptide; and
- (c) isolating the compound, thereby obtaining a compound that binds to said polypeptide.

75. (New) A method of obtaining a compound that binds to the polypeptide of claim 57, the method comprising

- (a) contacting a test sample with the polypeptide of claim 57;
- (b) detecting a compound in the test sample that binds to said polypeptide; and
- (c) isolating the compound, thereby obtaining a compound that binds to said polypeptide.

76. (New) An isolated nucleic acid, wherein the nucleic acid consists of a nucleotide sequence from the 498th nucleotide T to the 1523rd nucleotide in SEQ ID NO:2; a nucleotide sequence from the 498th nucleotide T to the 872nd nucleotide A in SEQ ID NO:4; or a nucleotide sequence from the 659th nucleotide A to the 1368th nucleotide C in SEQ ID NO:6.